

APPENDIX Z

INFORMATION SYSTEMS CAPABILITIES ASSESSMENT for MANAGED CARE ORGANIZATIONS and PREPAID HEALTH PLANS

An Appendix to the External Quality Review Activity protocols

Department of Health and Human Services
Centers for Medicare & Medicaid Services

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APPENDIX Z

INFORMATION SYSTEMS CAPABILITIES ASSESSMENT FOR MANAGED CARE ORGANIZATIONS / PREPAID INPATIENT HEALTH PLANS

I. PURPOSE OF THE ASSESSMENT

Knowledge of the capabilities of a Managed Care Organization (MCO) or Prepaid Inpatient Health Plan's (PIHP) information system (IS) is essential to effectively and efficiently:

- Validate MCO/PIHP encounter data,
- Calculate or validate MCO/PIHP performance measures, and
- Assess an MCO/PIHP's capacity to manage the health care of its enrollees well.

The purpose of this assessment is to specify the desired capabilities of the MCO/PIHP's IS, and to pose standard questions to be used to assess the strength of an MCO/PIHP with respect to these capabilities. This will assist an EQRO¹ to assess the extent to which an MCO/PIHP's information system is capable of producing valid encounter data, performance measures, and other data necessary to support quality assessment and improvement, as well as managing the care delivered to its enrollees.

Some States assess the capabilities of the MCO/PIHP's information system as part of pre-contracting, contract compliance, or contract renewal activities. If an assessment has been completed by the State through these or other means (e.g., private sector accreditation or performance measures validation), and the information gathered is the same as or consistent with what is described in this assessment, it may not be necessary to repeat this assessment process. However, information from a previously conducted assessment must be accessible to EQRO reviewers.

II. ORIGIN OF THE ASSESSMENT TOOL

A number of public and private sector protocols and tools were examined to promote consistency between this assessment and similar public and private sector activities. These included: 1) the National Committee for Quality Assurance's (NCQA) 1999 HEDIS7 publication: *Volume 5, HEDIS Compliance Audit 9 Standards and Guidelines*; 2) tools used by the Island Peer Review Organization (IPRO) in their audits of HEDIS measures, and 3) documents from the MEDSTAT Group, Inc., published in conjunction with work performed for the Centers for Medicare & Medicaid Services (CMS) (formerly the Health Care Financing Administration) in 1997 and

¹It is recognized that a State may choose an organization other than an EQRO as defined in Federal regulation to conduct an assessment of MCO/PIHP Information Systems (IS). However, for convenience, in this document we use the term External Quality Review Organization (EQRO) to refer to any organization conducting an assessment of an MCO/PIHP's IS.

1998. All these protocols include an assessment of the structure and integrity of the MCO/PIHP's underlying information system, and of the MCO/PIHP's ability to collect valid data from a variety of sources internal and external to the organization.

III. OVERVIEW OF THE ASSESSMENT

Assessment of MCO/PIHP's information systems is a process of 4 consecutive activities. Step one involves the collection of standard information about each MCO/PIHP's information system. This is accomplished by having the MCO/PIHP'S complete an *Information Systems Capability Assessment (ISCA) for Managed Care Organizations and Prepaid Health Plans*. The ISCA is an information collection tool provided to the MCO/PIHP by the State or its EQRO. The State or EQRO will define a time frame in which the MCO/PIHP is expected to complete and return the tool. Data will be recorded on the tool by the MCO/PIHP. Documents from the MCO/PIHP are also requested throughout the tool, and are summarized on the checklist at the end of this assessment tool. These are to be attached to the tool and should be identified as applicable to the numbered item on the tool (e.g., II.B.3, or IV.6). The tool itself is based on that produced by MEDSTAT Group, Inc., with some additional elements included to address the multiple purposes of performing assessments of information systems.

Steps two and three include a review of the ISCA information by EQRO staff, and interactive sessions with MCO/PIHP staff to: 1) validate the ISCA, and 2) gather additional information to assess the integrity of the MCO/PIHP's information. The EQRO can use the *Managed Care Organization Information System Review: Worksheet & Interview Guide* to conduct interviews with MCO/PIHP staff who completed the ISCA, as well as other necessary MCO/PIHP staff. The worksheet is an annotated version of the ISCA tool, with examples of the types of answers a reviewer should expect to receive, along with additional notes relative to the issues being pursued. During an onsite visit, EQRO staff may explore in more detail the responses submitted by the MCO/PIHP on the ISCA. The space to record answers may be used by the reviewers to write interview notes, or document specific issues identified during pre-visit analysis that need to be pursued with the MCO/PIHP during the onsite visit.

The fourth and final step is analyzing the findings from both the completed *Information Systems Capability Assessment (ISCA) for Managed Care Organizations and Prepaid Health Plans*, and the follow-up discussions with MCO/PIHP staff.

IV. ASSESSMENT ACTIVITIES

ACTIVITY 1: The MCO/PIHP completes the Information Systems Capabilities Assessment (ISCA)

The MCO/PIHP is provided a copy of the ISCA (enclosed in the following section) to complete. Completing the ISCA requires that the MCO/PIHP provide all requested documentation identified on a checklist at the end of the assessment tool, and return it to the EQRO within a State-defined time frame. The EQRO may wish to provide the ISCA in an electronic format to the MCO/PIHP to facilitate completion and to ensure legibility of the information being returned.

ACTIVITY 2: EQRO review of the completed ISCA and accompanying documents.

The EQRO reviews the completed ISCA and accompanying documents, assessing the adequacy of MCA/PIHP policies and procedures as portrayed by the information submitted by the MCO/PIHP on the ISCA. MCO/PIHP answers should be evaluated against the standards established by the State for: 1) MCI/PIHP information system, 2) calculating and reporting specific plan-level performance measures, and 3) collecting and submitting encounter data to the State. Where an answer seems incomplete, or indicates an inadequate process, the EQRO will note that section for follow-up and further review during the onsite activities. This will help to focus the onsite process on those specific policies, procedures, and documentation most likely to affect the integrity of information collected by the MCO.

ACTIVITY 3: Follow-up interviews with MCO/PIHP staff

The EQRO reviewer(s) conduct(s) interviews with MCO/PIHP staff responsible for completing the ISCA, as well as additional staff responsible for aspects of the MCO/PIHP's IS function. The interviews focus on the topics outlined in the structured ISCA interview guide, with additional topics covered as necessary based on the pre-onsite analysis of the ISCA.

ACTIVITY 4: Analysis of information obtained through ISCA and follow-up interviews.

The EQRO will write a statement of findings about the MCO/PIHP's IS and the implications of the findings for the following analysis, as directed by the State:

- 1) The completeness and accuracy of any encounter data collected and submitted to the State
- 2) Calculation or validation of performance measures
- 3) The ability of the MCO/PIHP to conduct quality assessment and improvement initiatives
- 4) The ability of the MCO/PIHP to oversee and manage the delivery of health care to its enrollees

Information System Capabilities Assessment (ISCA) For Managed Care Organizations/Prepaid Health Plans

I. GENERAL INFORMATION

Please provide the following general information:

Note: The information requested below pertains to the collection and processing of data for an MCO/PIHP's Medicaid line of business. In many situations, if not most, this may be no different than how an MCO/PIHP collects and processes commercial or Medicare data. However, for questions which may address areas where Medicaid data is managed differently than commercial or other data, please provide the answers to the questions as they relate to Medicaid enrollees and Medicaid data.

A. Contact Information

Please insert (or verify the accuracy of) the MCO/PIHP identification information below, including the MCO/PIHP name, MCO/PIHP contact name and title, mailing address, telephone and fax numbers, and E-mail address, if applicable.

MCO/PIHP Name:	
Contact Name and Title:	
Mailing address:	
Phone number:	
Fax number:	
E-mail address:	

B. Managed Care Model Type (Please circle one, or specify other.)

MCO-staff model MCO-group model MCO-IPA model MCO-mixed model PIHP

Other - specify: _____

C. Year Incorporated _____

D. Member Enrollment for the Last Three Years.

INSURER	Year 1:_____	Year 2 _____	Year 3:_____
Privately Insured			
Medicare			
Medicaid			
Other			

E. Has your organization ever undergone a formal IS capability assessment?

Circle a response: Yes No

If yes, who performed the assessment? _____

When was the assessment completed? _____

NOTE: If your MCO/PIHP's information has been formally assessed in the recent past (2 years or less), please attach a copy of the assessment report. Complete only those sections of the ISCA that are not covered by or have changed since the formal assessment was conducted.

II. INFORMATION SYSTEMS: DATA PROCESSING PROCEDURES & PERSONNEL

1. What data base management system(s) (DBMS) do/does your organization use to store Medicaid claims and encounter data?

2. How would you characterize this/these DBMSs? (*Circle all that apply.*)

- | | |
|-----------------|----------------|
| A. Relational | E. Network |
| B. Hierarchical | F. Flat File |
| C. Indexed | G. Proprietary |
| D. Other | H. Don't Know |

3. Into what DBMS(s), if any, do you extract relevant Medicaid encounter/claim/enrollment detail for analytic reporting purposes?

4. How would you characterize this/these DBMS(s)? (*Circle all that apply.*)

- | | |
|-----------------|----------------|
| A. Relational | E. Network |
| B. Hierarchical | F. Flat File |
| C. Indexed | G. Proprietary |
| D. Other | H. Don't Know |

5. What programming language(s) do your programmers use to create Medicaid data extracts or analytic reports? How many programmers are trained and capable of modifying these programs?

6. Do you calculate defect rates for programs?

Circle your response. Yes No

If yes, what methods do you use to calculate the defect rate?

What was the most recent time period? _____

What were the results? _____

7. Do you rely on any quantitative measures of programmer performance? If so, what method(s) do you use to measure the effectiveness of the programmer?

8. Approximately what percentage of your organization's programming work is outsourced?

_____ %

9. What is the average experience, in years, of programmers in your organization?

10. Approximately how many resources (time, money) are spent on training per programmer per year? What type of standard training for programmers is provided? What type of additional training is provided?

11. What is the programmer turnover rate for each of the last 3 years (new programmers per year/total programmers)?

Year 1 (200x): _____ %

Year 2 (200x): _____ %

Year 3 (200x): _____ %

12. Outline the steps of the maintenance cycle for your State's mandated Medicaid reporting requirement(s). Include any tasks related to documentation, debugging, roll out, training, etc. The level of detail should result in 10-25 steps in the outline.

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook paper. There are no margins, text, or other markings on the page.

13. What is the process for version control when code is revised?

14. How does your organization know if changes to the claims/encounter/enrollment tracking system affect required reporting to the State Medicaid program? What prompts your organization to change these systems?

15. Who is responsible for your organization meeting the State Medicaid reporting requirements (e.g., CEO, CFO, and COO)?

16. Staffing

16a. Describe the Medicaid data processing organization in terms of staffing and their expected productivity goals. What is the overall daily, monthly and annual productivity of overall department and by processor?

16b. Describe processor training from new hire to refresher courses for seasoned processors.

16c. What is the average tenure of the staff? What is annual turnover?

17. Security

17a. Describe how loss of Medicaid claim and encounter and other related data is prevented when systems fail? How frequently are system back-ups performed? Where is back-up data stored?

17b. How is Medicaid data corruption prevented due to system failure or to program error?

17c. Describe the controls used to assure all Medicaid claims data entered into the system is fully accounted for (e.g., batch control sheets).

17d. Describe the provisions in place for physical security of the computer system and manual files:

- Premises
- Documents
- Computer facilities
- Terminal access and levels of security

[illegible]

- 17e. What other individuals have access to the computer system? Customers? Providers? Describe their access and the security that is maintained restricting or controlling such access.

III. DATA ACQUISITION CAPABILITIES

The purpose of this section is to obtain a high-level understanding of how you collect and maintain claims/encounters, enrollment information and data on ancillary services such as prescription drugs.

A. Administrative Data (Claims and Encounter Data)

This section requests information on input data sources (e.g., paper and electronic claims) and on the transaction system(s) you use.

1. Do you use standard claims or encounter forms for the following? If yes, please specify (e.g., CMS1500, UB 92)

DATA SOURCE	NO	YES	IF YES, PLEASE SPECIFY
Hospital			
Physician			
Drug			
Nursing Home			
Home Health			
Mental health			
Other			

2. We would like to understand how claims or encounters are submitted to your plan. We are also interested in an estimate of what percentage (if any) of services provided to your enrollees by all providers serving your Medicaid enrollees are NOT submitted as claims or encounters and therefore are not represented in your administrative data. Please fill in the following table with the appropriate percentages:

CLAIMS OR ENCOUNTER TYPES

MEDIUM	Hospital	PCP	Specialist Physician	Dental	Mental health/ Substance abuse	Drug	Other
Claims/encounters submitted electronically							
Claims/encounters submitted on paper							
Services not submitted as claims or encounters							
TOTAL	100%	100%	100%	100%	100%	100%	100%

3. Please document whether the following data elements (data fields) are required by you for providers, for each of the types of Medicaid claims/encounters identified below. If required, enter an “R” in the appropriate box.

CLAIMS/ENCOUNTER TYPES

DATA ELEMENTS	Hospital	Primary Care Physician	Specialist Physician	Mental Health/ Substance Abuse	Dental	Drug	other
Patient Gender							
Patient DOB/Age							
Diagnosis							
Procedure							
First Date of Service							
Last Date of Service							
Revenue Code							
Provider Specialty							

4. How many diagnoses and procedures are captured on each claim? On each encounter?

	Claim		Encounter	
	Diagnoses	Procedures	Diagnoses	Procedures
Institutional Data				
Provider/Provider Group Data				

- 5a. Can you distinguish between principal and secondary diagnoses?

Circle your response. Yes No

- 5b. If “Yes” to 5a, above, how do you distinguish between principal and secondary diagnoses?

6. Please explain what happens if a Medicaid claim/encounter is submitted and one or more required fields are missing, incomplete or invalid. For example, if diagnosis is not coded, is the claims examiner required by the system to use an on-line software product like AutoCoder to determine the correct ICD-9 code?

Institutional Data: _____

Professional Data: _____

7. What steps do you take to verify the accuracy of submitted information (e.g., procedure code-diagnosis edits, gender-diagnosis edits, gender-procedure code edits)?

Institutional Data: _____

Professional Data: _____

8. Under what circumstances can claims processors change Medicaid claims/encounter information?

9. Identify any instance where the content of a field is intentionally different from the description or intended use of the field. For example, if the dependent's SSN is unknown, do you enter the member's SSN instead?

- 10a. How are Medicaid claims/encounters received?

SOURCE	Received Directly from Provider	Submitted through an Intermediary
Hospital		
Physician		
Pharmacy		
Nursing Home		
Home Health		
Mental health		
Other		

10b. If the data are received through an intermediary, what changes, if any, are made to the data.

11. Please estimate the percentage of Medicaid claims/encounters that are coded using the following coding schemes:

CODING SCHEME	Inpatient Diagnosis	Inpatient Procedure	Ambulatory/ Outpatient Diagnosis	Ambulatory/ Outpatient Procedure	Drug
ICD-9-CM					
CPT-4					
HCPCS					
DSM-IV					
National Drug Code					
Internally Developed					
Other (specify)					
Not required					
TOTAL	100%	100%	100%	100%	100%

12. Please identify all information systems through which service and utilization data for the Medicaid population is processed.

13. Please describe any major systems changes/updates that have taken place in the last three years in your Medicaid claims or encounter system (*be sure to provide specific dates on which changes were implemented*).

- New system purchased and installed to replace old system.
- New system purchased and installed to replace most of old system; old system still used.
- Major enhancements to old system (what kinds of enhancements?).
- New product line adjudicated on old system.
- Conversion of a product line from one system to another.

14. In your opinion, have any of these changes influenced, even temporarily, the quality and/or completeness of the Medicaid data that are collected? If so, how and when?

15. How many years of Medicaid data are retained on-line? How is historical Medicaid data accessed when needed?

16. How much Medicaid data is processed on-line vs. batch? If batch, how often are they run?

17. How complete are the Medicaid data three months after the close of the reporting period? How is completeness estimated? How is completeness defined?

18. What is your policy regarding Medicaid claim/encounter audits? Are Medicaid encounters audited regularly? Randomly? What are the standards regarding timeliness of processing?

19. Please provide detail on system edits that are targeted to field content, consistency. Are diagnostic and procedure codes edited for validity?

20. Please complete the following table for Medicaid claims and encounter data and other Medicaid administrative data. Provide any documentation that should be reviewed to explain the data that is being submitted.

	Claims	Encounters	Other Administrative Data
Percent of total service volume			
Percent complete			
How are the above statistics quantified?			
Incentives for data submission			

21. Describe the Medicaid claims/encounter suspend (“pend”) process including timeliness of reconciling pended services.

22. Describe how Medicaid claims are suspended/pended for medical review, for non-approval due to missing authorization code(s) or for other reasons. What triggers a processor to follow up on “pended” claims? How frequent are these triggers?

23. If any Medicaid services/providers are capitated, have you performed studies on the completeness of the information collected on capitated services? If yes, what were the results?

24a. Identify the claim/encounter system(s) for each product line offered to Medicaid enrollees. (Note: Typically, there is just one product line offered to Medicaid enrollees, but there may be some circumstances in which a MCO/PIHP offers additional product lines to the State (e.g., S-CHIP, partial risk products).

Systems Used to Process	Product Line: _____	Product Line: _____	Product Line: _____
Fee-for-service (indemnity) claims			
Capitated service encounters			
Clinic patient registrations			
Pharmacy claims			
Other (describe)			

24b. If multiple systems are used to process claims for the Medicaid product line, document how claims/encounters are ultimately merged into Medicaid-specific files--and on which platform? Note which merges or data transfers or downloads are automated and which rely on manual processes.

Are these merges and/or transfers performed in batch? With what frequency?

- 24c. Beginning with receipt of a Medicaid claim in-house, describe the claim handling, logging, and processes that precede adjudication. When are Medicaid claims assigned a document control number and logged or scanned into the system? When are Medicaid claims microfilmed? If there is a delay in microfilming, how do processors access a claim that is logged into the system, but is not yet filmed?

- 24d. Please provide a detailed description of each system or process that is involved in adjudicating:

- A professional encounter(s) for a capitated service (e.g., child immunizations that arrive separately from the office visit.)

- A hospital claim for a delivery or for a newborn who exceeds its mother's stay.

- 24e. Discuss which decisions in processing a Medicaid claim/encounter are automated, which are prompted by automated messages appearing on the screen, and which are manual. Document the opportunities a processor has for overriding the system manually. Is there a report documenting over-rides or "exceptions" generated on each processor and reviewed by the claim supervisor? Please describe this report.

- 24f. Are there any outside parties or contractors used to complete adjudication, including but not limited to:

- Bill auditors (hospital claims, claims over a certain dollar amount)
- Peer or medical reviewers
- Sources for additional charge data (Usual & customary)
- Bill "re-pricing" for carved out benefits (mental health, substance abuse)

How is this data incorporated into your organization's data?

- 24g. Describe the system's editing capabilities that assure that Medicaid claims are correctly adjudicated . Provide a list of the specific edits that are performed on claims as they are adjudicated, and note: 1) whether the edits are performed pre or post-payment, and 2) which are manual and which are automated functions.

- 24h. Discuss the routine and non-routine (ad hoc or special) audits that are performed on claims/encounters to assure the quality and accuracy and timeliness of processing. Note which audits are performed per processor, which rely on targeted samples and which use random sampling techniques. What is the total percentage of claims on-hand that are audited through these QA processes? How frequently?

- 24i. Please describe how Medicaid eligibility files are updated, how frequently and who has “change” authority. How and when does Medicaid eligibility verification take place?

- 24j. How are encounters for capitated services handled by payment functions? What message appears to notify processors that they are handling a capitated service?

- 24k. Describe how your systems and procedures handle validation and payment of Medicaid claims when procedure codes are not provided.

- 24l. Where does the system-generated output (EOBs, letters, etc.) reside? In-house? In a separate facility? If located elsewhere, how is such work tracked and accounted for?

- 25a. Describe all performance monitoring standards for Medicaid claims/encounters processing and recent actual performance results.

- 25b. Describe processor-specific performance goals and supervision of actual vs. target performance. Do processors have to meet goals for processing speed? Do they have to meet goals for accuracy?

- 25c. How is performance against targets figured into the official performance appraisal process? Into processor and supervisor compensation?

B. Enrollment System

1. Please describe any major changes/updates that have taken place in the last three years in your Medicaid enrollment data system *(be sure to identify specific dates on which changes were implemented)* for example:

- New enrollment system purchased and installed to replace old system
- New enrollment system purchased and installed to replace most of old system - is old system still used
- Major enhancements to old system (what kinds of enhancements?)
- New product line members stored on old system

2. In your opinion, have any of these changes influenced, even temporarily, the quality and/or completeness of the Medicaid data that are collected? If so, how and when?

3. How does your plan uniquely identify enrollees?

4. How do you handle enrollee disenrollment and re-enrollment in the Medicaid product line? Does the member retain the same ID?

5. Can your systems track enrollees who switch from one product line (e.g., Medicaid, commercial plan, Medicare) to another?

Circle your response. Yes No

- 5a. Can you track an enrollee's initial enrollment date with your MCO/PIHP or is a new enrollment date assigned when a member enrolls in a new product line?

- 5b. Can you track previous claim/encounter data or are you unable to link previous claim/encounter data across product lines?

6. Under what circumstances, if any, can a Medicaid member exist under more than one identification number within your MCO/PIHP's information management systems? Under what circumstances, if any, can a member's identification number change?

7. How does your MCO/PIHP enroll and track newborns born to an existing Medicaid enrollee ?

7a. If your MCO/PIHP has a Medicare product line, describe how your enrollment systems link individuals simultaneously enrolled in both your Medicare product line and the Medicaid plan product line.

8a. Is claim/encounter data linked for Medicare/Medicaid dual eligibles so that all encounter data can be identified for the purposes of performance measure reporting?

Circle your response. Yes No

8b. Is claim/encounter data linked for individuals enrolled in both a Medicare and Medicaid plan so that all encounter data can be identified for the purposes of performance measure reporting?

Circle your response. Yes No

9. How often is Medicaid enrollment information updated?

10. How is Medicaid continuous enrollment being defined? In particular, does your system have any limitations that preclude you from fully implementing continuous enrollment requirements exactly as specified in the State performance measure requirements?

11. Please attach a copy of the source code that you use to calculate Medicaid continuous enrollment.

12. How do you handle breaks in Medicaid enrollment--e.g. situations where a Medicaid enrollee is disenrolled one day and re-enrolled the next simply for administrative reasons? Does this affect your continuous enrollment calculations?

13. Do you have restrictions on when Medicaid enrollees can enroll or disenroll? Please describe.

14. How do you identify and count Medicaid member months? Medicaid member years?

15. Please identify all data from which claims/encounters for the Medicaid product line are verified.

Does the plan offer vision or pharmacy benefits to its Medicaid members that are different from the vision or pharmacy benefits offered to its commercial enrollees (within a given contract or market area)? *Circle your response.* Yes No

If yes, explain: _____

16a. If vision benefits vary by benefit package, outline the different options available. How are enrollees tracked?

16b. If pharmacy benefits vary by benefit package, outline the different options available. How are enrollees tracked?

C. Ancillary Systems

Use this section to record information on stand-alone systems or benefits provided through subcontracts, such as pharmacy or mental health/substance abuse.

1. Does your MCO/PIHP incorporate data from vendors to calculate any of the following Medicaid quality measures? If so, which measures require vendor data?

NOTE: The measures listed in the following table are examples of measures that can be calculated with administrative data. The State and EQRO should tailor this table to list those measures that the State requires its MCO/PIHP contractors to produce and any other measures in which the State is interested.

MEASURE	VENDOR NAME
Childhood and Adolescent Immunization Rate(s)	
Well Child Visits	
Initiation of Prenatal Care	
Cervical Cancer Screening	
Chlamydia Screening in Women	
Low Birth weight	
Prenatal Care in First Trimester	
Breast Cancer Screening (Mammography	
Glycohemoglobin Monitoring	
Ambulatory Follow-Up After Hospitalization For Specified Mental Health Disorders	
Provider Certification	

2. Discuss any concerns you may have about the quality or completeness of any vendor data.

3. Please list subcontracted Medicaid benefits that are adjudicated through a separate system that belongs to a vendor.

4. Describe the kinds of information sources available to the MCO/PIHP from the vendor (e.g., monthly hard copy reports, full claims data).

5. Do you evaluate the quality of this information? If so, how?

6. Did you incorporate these vendor data into the creation of Medicaid-related studies? If not, why not?

D. Integration and Control of Data for Performance Measure Reporting

This section requests information on how your MCO/PIHP integrates Medicaid claims, encounter, membership, provider, vendor, and other data to calculate performance rates. All questions relate to your current systems and processes, unless indicated otherwise.

File Consolidation

1. Please attach a flowchart outlining the structure of your management information systems, indicating data integration (i.e., claims files, encounter files, etc.). For an example of the minimum level of detail requested, please refer to the example on page 38. Label the attachment II.D.1.
2. In consolidating data for Medicaid performance measurement, how are the data sets for each measure collected:
 - By querying the processing system online?
 - By using extract files created for analytical purposes? If so, how frequently are the files updated? How do they account for claim and encounter submission and processing lags? How is the file creation process checked for accuracy?
 - By using a separate relational database or data warehouse (i.e., a performance measure repository)? If so, is this the same system from which all other reporting is produced?

3. Describe the procedure for consolidating Medicaid claims/encounter, member, and provider data for performance measure reporting (whether it is into a relational database or file extracts on a measure-by-measure basis).

3a. How many different sources of data are merged together to create reports?

3b. What control processes are in place to ensure data merges are accurate and complete?

3c. What control processes are in place to ensure that no extraneous data are captured (e.g., lack of specificity in patient identifiers may lead to inclusion of non-eligible members or to double counting)?

3d. Do you compare samples of data in the repository to transaction files to verify if all the required data are captured (e.g., were any members, providers, or services lost in the process)?

3e. Describe your process(es) to monitor that the required level of coding detail is maintained (e.g., all significant digits, primary and secondary diagnoses remain)?

4. Describe both the files accessed to create Medicaid performance measures and the fields from those files used for linking or analysis. *Use either a schematic or text to respond.*

5. Are any algorithms used to check the reasonableness of data integrated to report Medicaid performance measures?

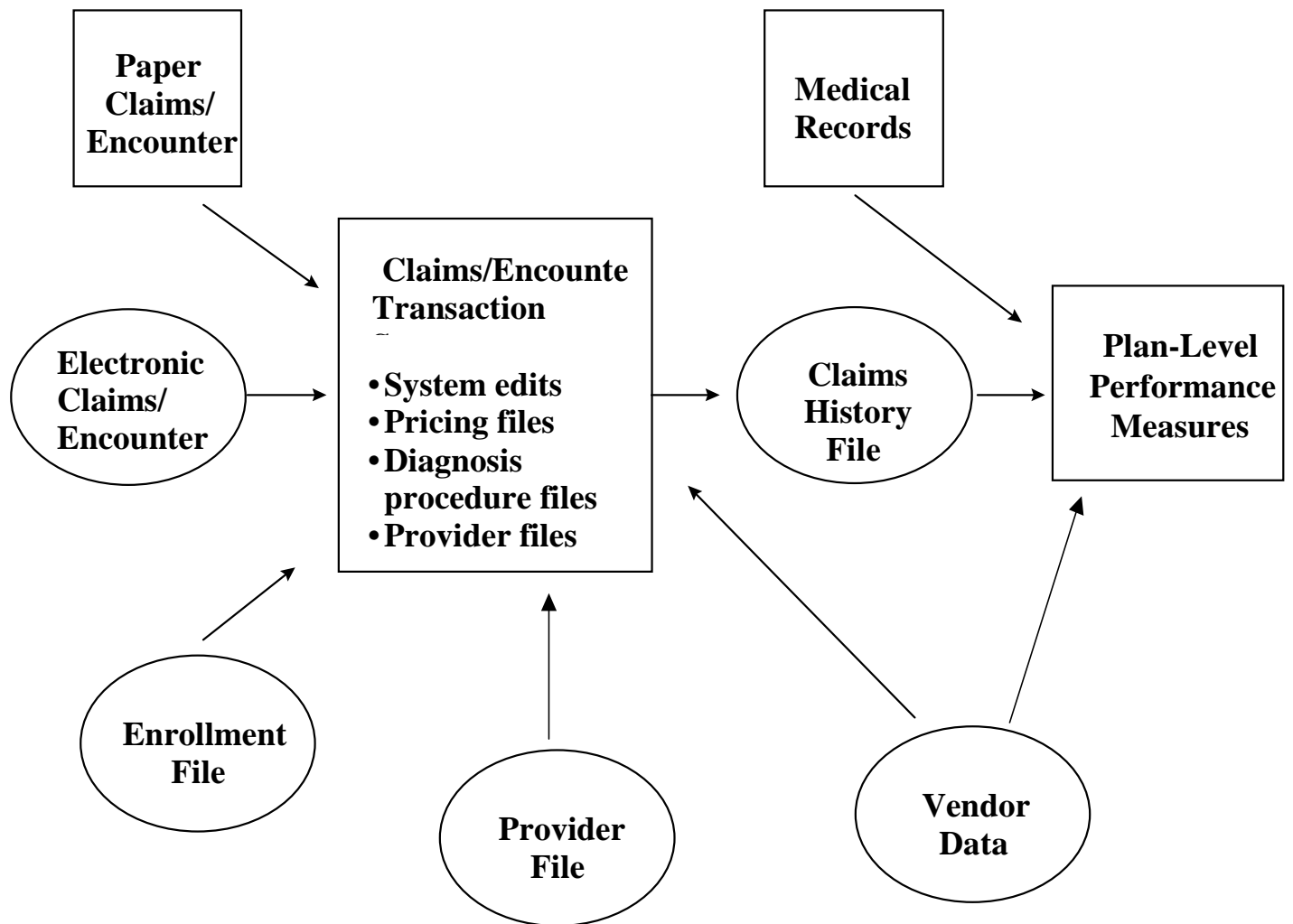
6. Are Medicaid reports created from a vendor software product? If so, how frequently are the files updated? How are reports checked for accuracy?

7. Are data files used to report Medicaid performance measures archived and labeled with the performance period in question?

Information System Capabilities Assessment (ISCA)

EXAMPLE

Performance Measure Data: Flowchart of Information System Structure



Vendor Data Integration

8. Information on several types of external encounter sources is requested. In the table on the following page, for each type of delegated service, please indicate the following:

- Second column: Indicate the number of vendors contracted (or subcontracted) to provide the Medicaid service. Include vendors that offer all or some of the service.
- Third column: Indicate whether your MCO/PIHP receives member-level data for any Medicaid performance measure reporting from the vendor(s). Only answer “Yes” if all data received from contracted vendor(s) are at the member level. If *any* encounter-related data is received in aggregate form, you should answer “No”. If type of service is not a covered benefit, indicate “N/A”.
- Fourth column: Indicate whether all data needed for Medicaid performance measure reporting are integrated, at the member-level, with MCO/PIHP administrative data.
- Fifth and sixth columns: rank the completeness and quality of the Medicaid data provided by the vendor(s). Consider data received from all sources when using the following data quality grades:
 - A. Data are complete or of high quality
 - B. Data are generally complete or of good quality
 - C. Data are incomplete or of poor quality
- In the seventh column, describe any concerns you have in ensuring completeness and quality of Medicaid data received from contracted vendors. If measure is not being calculated because of any eligible members, please indicate “N/A”.

Medicaid Claim/Encounter Data from Vendors

Type of Delegated Service	Number of Contracted Vendors	Always receive member-level data from all vendor(s)? (Yes or No)	Integrate vendor data with MCO/PIHP administrative data? (Yes or No)	Completeness of Data (A, B, or C)	Quality of Data (A, B, or C)	Rationale for Rating/Concerns with Data Collection
Behavioral Health						
Family Planning						
Home Health Care						
Hospital						
Laboratory						
Pharmacy						
Primary Care						
Radiology						
Specialty Care						

Vision Care						

Performance Measure Repository Structure

If your MCO/PIHP uses a performance measure repository, please answer the following question. Otherwise, skip to the Report Production section.

9. If your MCO/PIHP uses a performance measure repository for Medicaid performance measures, review the repository structure. Does it contain all the key information necessary for Medicaid performance measure reporting?

Report Production

10. Please describe your Medicaid report production logs and run controls. Please describe your Medicaid performance measure report generation process.

11. How are Medicaid report generation programs documented? Is there a type of version control in place?

12. How does your MCO/PIHP test the process used to create Medicaid performance measure reports?

13. Are Medicaid performance measure reporting programs reviewed by supervisory staff?

14. Do you have internal back-ups for performance measure programmers (i.e., do others know the programming language and the structure of the actual programs)? Is there documentation?

15. How are revisions to Medicaid claims, encounters, membership, and provider data systems managed?

IV. PROVIDER DATA

Compensation Structure

The purpose of this section is to evaluate the Medicaid provider compensation structure, as this may influence the quality and completeness of data. Please identify the percentage of member months in your plan contributed by Medicaid members whose primary care providers and specialists are compensated through each of the following payment mechanisms.

PAYMENT MECHANISM	Primary Care Physician	Specialist Physician
1. Salaried		
2. Fee-for-Service, no withhold or bonus		
3. Fee-for-Service, with withhold Please specify % withhold:		
4. Fee-for-Service with bonus Bonus range:		
5. Capitated - no withhold or bonus		
6. Capitated with withhold Please specify % withhold:		
7. Capitated with bonus Bonus range:		
8. Other		
TOTAL	100%	100%

9. Please describe how Medicaid provider directories are updated, how frequently, and who has “change” authority.

9a. Does your MCO/PIHP maintain provider profiles in its IS?

Please circle response: YES NO

9b. If yes to “a,” what provider information is maintained in the provider profile database; e.g. languages spoken, special accessibility for individuals with special health care needs. Other? *Please describe:*

10. How are Medicaid fee schedules and provider compensation rules maintained? Who has updating authority?

11. Are Medicaid fee schedules and contractual payment terms automated? Is payment against the schedules automated for all types of participating providers?

Summary of Requested Documentation

The documentation requested in the previous questions is summarized in the table below. Please label all attached documentation as described in the table, and when applicable by the item number from the ISCA (e.g., III.B.10). Remember, you are not limited to providing only the documentation listed below; you are encouraged to provide any additional documentation that helps clarify an answer or eliminates the need for a lengthy response.

Requested Document	Details
Previous Medicaid Performance Measure Audit Reports	Please attach final reports from any previous Medicaid performance measure audits in which your MCO/PIHP participated during the past two years.
Organizational Chart	Please attach an organizational chart for your MCO/PIHP. The chart should make clear the relationship among key Individuals/departments responsible for information management, including performance measure reporting.
Data Integration Flow Chart	Please provide a flowchart that gives an overview of the structure of your management <i>IS</i> . See the example provided in Section II-D. “Integration and Control of Data for Performance Measure Reporting.” Be sure to show how all claims, encounter, membership, provider, and vendor data are integrated for performance measure reporting.
Performance Measure Repository File Structure (if applicable)	Provide a complete file structure, file format, and field definitions for the performance measure repository.
Program/Query Language for Performance Measure Repository Reporting (if applicable)	Provide full documentation on the software programs or codes used to convert performance measure repository data to performance measures.
Continuous Enrollment Source Code	Attach a copy of the source code/computer programs that you use to calculate continuous enrollment for Medicaid enrollees.
Medicaid Member Months Source Code	Attach a copy of the source code/computer programs that you use to calculate member months, member years for Medicaid enrollees.
Medicaid Claims Edits	List of specific edits performed on claims as they are adjudicated with notation of performance timing (pre or post-payment) and whether they are manual or automated functions.
Statistics on Medicaid claims/encounters and other administrative data	Documentation that explains statistics reported in the ISCA.

Information System Capabilities Assessment for Managed Care Organizations/Prepaid Health Plans

Reviewer Worksheet and Interview Guide

This annotated version of the *Information System Capabilities Assessment for Managed Care Organizations / Prepaid Health Plans (ISCA)* is provided for EQRO personnel to: 1) record their findings from the review of ISCA forms completed by the each MCO/PIHP, 2) note issues to be addressed in follow-up interviews with MCO/PIHP personnel, and 3) to record their findings from those interviews. EQRO staff may need to revise this form to provide additional space under each question to record issues and findings.

I. GENERAL INFORMATION

Interviewee(s) names and titles: _____

Interviewer(s) names and titles: _____

Date of interview: _____

Please provide the following general information:

Note: The information requested below pertains to the collection and processing of data for an MCO/PIHP's Medicaid line of business. In many situations, if not most, this may be no different than how an MCO/PIHP collects and processes commercial or Medicare data. However, for questions which may address areas where Medicaid data is managed differently than commercial or other data, please provide the answers to the questions as they relate to Medicaid enrollees and Medicaid data.

A. Contact Information

Please insert (or verify the accuracy of) the MCO/PIHP identification information below, including the MCO/PIHP name, MCO/PIHP contact name and title, mailing address, telephone and fax numbers, and E-mail address, if applicable.

MCO/PIHP Name:	
Contact Name and Title:	
Mailing address:	
Phone number:	
Fax number	
E-mail address:	

B. Managed Care Model Type (Please circle one, or specify "other.")

MCO-staff model MCO-group model MCO-IPA MCO-mixed model PIHP
 Other - specify: _____

C. Year Incorporated _____

D. Member Enrollment for the Last Three Years.

INSURER	Year 1: _____	Year 2: _____	Year 3: _____
Privately Insured			
Medicare			
Medicaid			
Other			

E. Has your organization ever undergone a formal IS capability assessment?

Circle a response: Yes No

If yes, who performed the assessment? _____

When was the assessment completed? _____

NOTE: If your MCO/PIHP's information system has been formally assessed in the recent past (2 years or less), please attach a copy of the assessment report. Complete only those sections of the ISCA that are not covered by or have changed since the formal assessment was conducted.

II. INFORMATION SYSTEMS: DATA PROCESSING PROCEDURES & PERSONNEL

Interviewee(s) names and titles: _____

Interviewer(s) names and titles: _____

Date of interview: _____

The State and the MCO/PIHP should be certain that data being reported are not only accurate today, but also have a reasonable chance of being accurate for future reporting periods. Future accuracy can be predicted by assessing the MCO/PIHP's systems development cycle and supporting environment. Plans that lack development checkpoints and controls are much more likely to introduce errors as systems change. The following criteria can be used to subjectively assess the likelihood of future reporting anomalies. States should be informed that very few programming shops in the world really meet all the desirable criteria. The EQRO will consider the status of checkpoints and controls in its overall assessment of findings.

1. What data base management system(s) (DBMS(s)) does your organization use to store Medicaid claims and encounter data?

2. How would you characterize this/these DBMSs? *Circle all that apply.*

- | | |
|-----------------|----------------|
| A. Relational | E. Network |
| B. Hierarchical | F. Flat File |
| C. Indexed | G. Proprietary |
| D. Other | H. Don't Know |

[Knowing the DBMS provides an indication of the organization's overall level of sophistication typical responses would include Oracle, DB2, VTAM, Paradox, dBase, R:Base, Sybase, Informix, SAS, Rdb, etc.]

3. Into what DBMS(s), if any, do you extract relevant Medicaid encounter/claim/enrollment detail for analytic reporting purposes?

4. How would you characterize this/these DBMS(s)? *Circle all that apply:*

- | | |
|-----------------|----------------|
| A. Relational | E. Network |
| B. Hierarchical | F. Flat File |
| C. Indexed | G. Proprietary |
| D. Other | H. Don't Know |

[Answers to these questions will provide an indicator of how the process works. Note that it is possible that reports are generated directly from the incidence database without any intermediate extraction.]

5. What programming language(s) do your programmers use to create Medicaid data extracts or analytic reports? How many programmers are trained and capable of modifying these programs?

[For example, many more Cobol programmers are available on the market than for Smalltalk.]

6. Do you calculate defect rates for programs?

Circle your response. Yes No

If yes, what methods do you use?

7. Do you rely on any quantitative measures of programmer performance? If so, what method(s) do you use?

[Methods to calculate defect rates and productivity measures are indicators of the IS organization's level of sophistication. Very few firms calculate either of these very well today, if at all. Typical methods would include Lines of Code (LoC), Pages of code, ration of severe bugs to all bugs found, or Function Points (FP).]

8. Approximately what percentage of your organization's programming work is outsourced?
_____ %

9. What is the average experience, in years, of programmers in your organization?

10. Approximately how many resources (time, money) are spent on training per programmer per year? What type of standard training for programmers is provided? What type of additional training is provided?

11. What is the programmer turnover rate for each of the last 3 years (new programmers per year/total programmers)?

Year 1 (200x) : _____ %

Year 2 (200x): _____ %

Year 3 (200x): _____ %

[These questions attempt to determine the stability and expertise of the IS department. Answers to these questions can provide additional insight into the development cycle responses. Outsourcing means using non-employees to get the work done, sometimes off-site, in which case project specification, management, coordination and acceptance become key success factors. Ask for a guess if the turnover rate is unknown. However, not knowing the rate is an indicator of higher-than-usual turnover.]

12. Outline the steps of the maintenance cycle for your State's mandated Medicaid reporting requirement(s). Include any tasks related to documentation, debugging, roll out, training, etc. The level of detail should result in 10-25 steps in the outline.

[illegible]

13. What is the process for version control when code is revised?

[The IS department should follow a standardized process when updating and revising code. This process should include safeguards which ensure that the correct version of a program is in use.]

14. How does your organization know if changes to the claims/encounter/enrollment tracking system impact required reporting to the State Medicaid program? What motivates you to update the program?

[A specific individual within the organization should be responsible for determining the impact of any changes made to the plan's claims/encounter/enrollment tracking systems. The plan should have in place a system for triggering IS staff to update the programs.]

15. Who is responsible for your organization meeting the State Medicaid reporting requirements (e.g., CEO, CFO, and COO)?

16. Staffing

- 16a. Describe the data processing organization in terms of staffing and their expected productivity goals. What is the overall daily, monthly and annual productivity of overall department and by processor?

[Unusually high productivity goals can affect the accuracy and quality of a processor's work.]

- 16b. Describe processor training from new hire to refresher courses for seasoned processors.

[New hires should be provided with on-the-job training and supervision. Supervisors should closely audit the work of new hires before suspending the training process. Seasoned processors should be given occasional refresher courses and training concerning any system modifications.]

- 16c. What is the average tenure of the staff? What is annual turnover?

[A larger number of new employees or high turn-over of experienced staff could result in decreased accuracy and processing speed.]

17. Security

- 17a. Describe how loss of Medicaid claim and encounter and other related data is prevented when systems fail? How frequently are system back-ups performed? Where is back-up data stored?

[System back-ups should be performed daily (at a minimum) to prevent against data loss. Back-up data should be stored on separate systems or tape, diskettes or DAT, and stored in a separate location in case of fire, flood, etc.]

- 17b. How is Medicaid data corruption prevented due to system failure or to program error?

[A back-up procedure will protect the data from destruction due to system failure and program error. Plans can also institute additional safeguards to protect data from being written over during these processes.]

- 17c. Describe the controls used to assure all Medicaid claims data entered into the system is fully accounted for (e.g., batch control sheets).

[The plan should have a process in place that ensures that all claims/encounters which have been logged as received are entered into the system and processed.]

- 17d. Describe the provisions in place for physical security of the computer system and manual files:

- Premises
- Documents
- Computer facilities
- Terminal access and levels of security

[The system should be protected from both unauthorized usage and accidental damage. Paper based claims/encounters should be in locked storage facilities when not in use. The computer system and terminals should be protected from unauthorized access using a password system and security screens. Passwords should be changed frequently and should be re-set whenever an employee terminates.]

[illegible]

- 17e. What other individuals have access to the computer system? Customers? Providers? Describe their access and the security that is maintained restricting or controlling such access.

[Both customers and providers should have their access limited to read-only so that they cannot alter any files. They should be given access to only those files containing their own patients or members. Customers should be prevented from accessing highly confidential patient information by being given “blinded” patient names and “scrambled” ID numbers, or restricted access to particular files.]

III. DATA ACQUISITION CAPABILITIES

Interviewee(s) names and titles:_____

Interviewer(s) names and titles:_____

Date of interview:_____

The purpose of this section is to obtain a high-level understanding of how you collect and maintain claims/encounters, enrollment information and data on ancillary services such as prescription drugs.

A. Administrative Data (Claims and Encounter Data)

This section requests information on input data sources (e.g., paper and electronic claims) and on the transaction system(s) you use.

1. Do you use standard claims or encounter forms for the following? If yes, please specify (e.g., CMS1500, UB 92)

DATA SOURCE	NO	YES	IF YES, PLEASE SPECIFY
Hospital			
Physician			
Drug			
Other			

(Plans that do not use either CMS 1500 or UB 92 forms may be using forms they developed themselves. If a plan is using its own forms, these forms should be reviewed to ensure they are capturing the following key data elements: patient identification information [SSN, name, date of birth, gender], provider identifying information [Tax ID, name], date of service, place of service and diagnoses and procedure codes. An evaluation of their forms to ascertain adequacy and completeness of data collection may be necessary.

2. We would like to understand the means by which claims or encounters are submitted to your plan. We are also interested in an estimate of what percentage (if any) of services provided to your enrollees by all providers serving your Medicaid enrollees are NOT submitted as claims or encounters and therefore are not represented in your administrative data. Please fill in the following table with the appropriate percentages:

CLAIMS OR ENCOUNTER TYPES

MEDIUM	Hospital	PCP	Specialist Physician	Dental	Mental Health /Substance Abuse	Drug	Other
Claims/encounters submitted electronically							
Claims/encounters submitted on paper							
Services not submitted as claims or encounters							
TOTAL	100%	100%	100%	100%	100%	100%	100%

(Since paper forms need to be entered into a plan's system, processing paper forms is prone to error. If a plan is receiving more than 50 percent of its data on paper forms, verify the data checks the plan uses to test processor accuracy. Electronic data submission should also undergo data edits and validity checks. Plans with a high percentage of unavailable data for a particular category will have difficulty reporting measures that use that category. For example, a plan receiving no drug data from its vendor would not be able to report the HEDIS measures for Outpatient Drug Utilization.)

3. Please document whether the following data elements are required for each of the types of Medicaid claims/encounters identified below. If required, enter an "R" in the appropriate box.

CLAIMS/ENCOUNTER TYPES

DATA ELEMENTS	Hospital	Primary Care Physician	Specialist Physician	Dental	Mental Health / Substance Abuse	Drug	other
Patient Gender							
Patient DOB/Age							
Diagnosis							
Procedure							
First Date of Service							
Last Date of Service							
Revenue Code							
Provider Specialty							

(Standard measures of plan performance such as Medicaid HEDIS are dependent upon the availability of the fields listed above. If procedure codes or diagnosis codes are not available, the data will not include the necessary level of detail to report performance measures.)

4. How many diagnoses and procedures are captured on each claim? On each encounter?

	Claim		Encounter	
	Diagnoses	Procedures	Diagnoses	Procedures
Institutional Data				
Professional Data				

(A minimum of two diagnosis codes and two procedure codes should be available. If only one diagnosis is available, it may be difficult to identify patients with chronic conditions such as diabetes or asthma.)

- 5a. Can you distinguish between principal and secondary diagnoses?

Circle your response. Yes No

(Some plans will consider the first diagnosis on the claim to be principal. Other plans determine the principal diagnosis by selecting the most expensive condition represented.)

- 5b. If yes, to 5.a above how do you distinguish between principal and secondary diagnoses?

6. Please explain what happens if a Medicaid claim/encounter is submitted and one or more required fields are missing, incomplete or invalid. For example, if diagnosis is not coded, is the claims examiner required by the system to use an on-line software product like Auto-Coder to determine the correct ICD-9 code?

(The use of an automated coding product such as GMIS' AutoCoder can result in more consistent coding of missing information. Plans that do not use such a product may allow processors to make their own decisions on appropriate coding. Processor judgment could result in less accurate coding.)

Institutional Data: _____

Professional Data: _____

7. What steps do you take to verify the accuracy of submitted information (e.g., procedure code-diagnosis edits, gender-diagnosis edits, gender-procedure code edits)?

(For example, plans will often verify that the information in procedure code and diagnosis code fields is valid codes. Plans may also verify that diagnosis and procedure codes are appropriate for age and gender. For example, a claim with a procedure of hysterectomy should be for a female patient.)

Institutional Data: _____

Professional Data: _____

8. Under what circumstances can claims processors change Medicaid claims/encounter information?

(If processors are given the ability to modify claims/encounter information, the accuracy of that information could be affected either negatively or positively. Processors may simply correct data that was submitted incorrectly, which would increase the quality of the data. However, processors may also change diagnosis and procedure codes which could result in a loss of coding specificity. Does the plan check processed data against paper claims?)

9. Identify any instance where the content of a field is intentionally different from the description or intended use of the field. For example, if the dependent's SSN is unknown, do you enter the member's SSN instead?

(Changing the content of a field can create data processing issues. For example, if the enrollee's SSN is used as an ID for a number of dependents, the claim may be given the age and sex of the member rather than the actual patient. The use of the enrollee's SSN would make it difficult to track the dependent's experience over time.)

- 10a. How are Medicaid claims/encounters received?

SOURCE	Received directly from provider	Submitted through an Intermediary
Hospital		
Physician		
Pharmacy		
Other		

- 10b. If the data are received through an intermediary, what changes, if any, are made to the data?

(Intermediaries that are processing the data, such as a pharmacy benefit firm, could modify the data, creating a data set that is inconsistent with the plan's data. The intermediary may define field content differently or may not be using the same fields as the plan, making it difficult to integrate the intermediary's data into the plan's systems. All data submitted through an intermediary should be monitored for quality by the plan.)

11. Please estimate the percentage of Medicaid claims/encounters that are coded using the following coding schemes:

CODING SCHEME	Inpatient Diagnosis	Inpatient Procedure	Ambulatory/ Outpatient Diagnosis	Ambulatory/ Outpatient Procedure	Drug
ICD-9-CM					
CPT-4					
HCPCS					
DSM-IV					
National Drug Code					
Internally Developed					
Other (specify)					
Not required					
TOTAL	100%	100%	100%	100%	100%

(If a plan is using internally-developed coding schemes, the State should verify whether this coding can be mapped to standard coding such as ICD-9 or CPT-4. If the coding can be translated for reporting purposes [Medicaid HEDIS requires diagnosis and procedure codes], the plan should provide information on the level of specificity with which the coding maps to standard coding [e.g., three-digit specificity or five-digit specificity]. If the mapping has a low level of specificity, information on co-morbidities and complications may not be retained during translation.)

12. Please identify all systems through which service and utilization data for the Medicaid population are processed.

(Each upgrade or consolidation of the plan's information system has the potential to damage the quality of the data. For example, data could be lost or corrupted during a system conversion, or a new system could limit a plan's access to historical data. Changes in data quality and access will affect the plan's ability to report performance measures and utilization.)

13. Please describe any major systems changes/updates that have taken place in the last three years in your Medicaid claims or encounter system (*be sure to provide specific dates on which changes were implemented*).

- New system purchased and installed to replace old system
- New system purchased and installed to replace most of old system: old system still used
- Major enhancements to old system (what kinds of enhancements?)
- New product line adjudicated on old system
- Conversion of a product line from one system to another.

[When a plan undertakes any major system changes such as conversion to a new system, the system changes could affect data quality. Data quality problems include corruption of data, loss of data, and loss of the level of detail within the data. The implementation of a new system can also affect the accessibility of historical data.]

14. In your opinion, have any of these changes influenced, even temporarily, the quality and/or completeness of the Medicaid data that are collected? If so, how and when?

[System conversions could affect the quality or completeness of encounter data the plan submits to the State, or the accuracy of performance measures. A temporary decrease in data quality could be a sign of a more serious undiscovered problem.]

15. How many years of Medicaid data are retained on-line? How is historical Medicaid data accessed when needed?

[Due to system constraints, a plan may remove historical data and place it in off-line storage. The MCO/PIHP's ability to report on experience spanning several years of data could be affected by the accessibility of the data stored off-line.]

16. How much Medicaid data is processed on-line vs. batch? If batch, how often are they run?

[Data which are processed on-line will be incorporated into the system on a real-time basis. If batch processing is not conducted frequently, it can result in data processing lags which affect data completeness.]

17. How complete are the Medicaid data three months after the close of the reporting period?
How is completeness estimated? How is completeness defined?

[The completeness of data three months after the close of the reporting period can vary greatly by plan. A plan's contracting arrangements with providers can affect data completeness. Plans that delegate provider payment or data collection to medical groups or IPAs are less likely to have complete data three months after the reporting period ends.]

18. What is your policy regarding Medicaid claim/encounter audits? Are Medicaid encounters audited regularly? Randomly? What are the standards regarding timeliness of processing?

[Plans should be performing random periodic audits of their encounter data to determine the quality of data processing. Plans that do not perform audits at least annually are not closely monitoring the quality of data processing. Plan standards regarding timeliness of processing will influence the lag time for encounter data processing.]

19. Please provide detail on system edits that are targeted to field content, consistency. Are diagnostic and procedure codes edited for validity?

[MCOs/PIHPs should have an established, standard set of edits that verify field content and consistency. For example, a field content data edit would verify that a valid date is entered into the date of service field. Key fields which should be edited include patient identifying information (SSN, name, date of birth, sex), provider identifying information (name, tax ID, type), date and place of service, and diagnosis and procedure codes. The quality of diagnosis and procedure coding will affect the validity of reports and performance measures submitted by the MCO/PIHP.]

20. Please complete the following table for Medicaid claim and encounter data and other Medicaid Administrative data. Provide any documentation that should be reviewed to explain the data that is being submitted.

	Claims	Encounters	Other Administrative Data
Percent of total service volume			
Percent complete			
How are the above statistics quantified?			
Incentives for data submission			

[MCOs/PIHPs with claims data comprising more than 50 percent of their total service volume are likely to have a more complete representation of total MCO/PIHP experience than MCOs/PIHPs that rely heavily on encounter data. While providers have an incentive to submit claims in order to receive payment for services, they do not always have incentives to submit encounter information. If an MCO/PIHP does not offer providers an incentive, or does not require the submission of encounter data, the MCO/PIHP may not receive data for every encounter. Other administrative data collected by an MCO/PIHP could include data from pharmacy or laboratory vendors.]

21. Describe the Medicaid claims/encounter suspend (“pend”) process including timeliness of reconciling pended services.

[Pended claims/encounters are those claims/encounters that have been suspended during processing because they failed data quality edits or violated provider payment parameters. Information on these claims and encounters will not be available for reporting until they have been reconciled and processed into the system. What percentage of claims are suspended or pended?]

[illegible]

22. Describe how Medicaid claims are suspended/pended for medical review, for non-approval due to missing authorization code(s) or for other reasons. What triggers a processor to follow up on "pended" claims? How frequent are these triggers?

[Review and processing should not be handled by the same employee. A system should be in place which encourages the processor to follow-up on the status of claims in review that have not yet been approved to ensure they are resolved.]

23. If any Medicaid services/providers are capitated, have you performed studies on the completeness of the information collected on capitated services. If yes, what were the results?

[Since provider payment for capitated services is not determined by the encounter data submitted, providers do not have an incentive to submit complete and accurate information on every service provided. Data on capitated services often does not include the same level of detail as fee-for-service claims information. Plans should be aware that capitated data is less complete and should audit the data at least annually to monitor its quality.]

24a. Identify the claim/encounter system(s) for each product line offered to Medicaid enrollees:

Systems Used to Process	Product Line: _____	Product Line: _____	Product Line: _____
Fee-for-service (indemnity) claims			
Capitated service encounters			
Clinic patient registrations			
Pharmacy claims			
Other (describe)			

24b. If multiple systems are used to process claims for the Medicaid product line, document how claims/encounters are ultimately merged into Medicaid-specific files--and on which platform? Note which merges or data transfers or downloads are automated and which rely on manual processes.

[When data are merged across multiple systems, records or data elements can be altered or lost during the conversion and integration processes. Multiple conversions, integrations, and the use of manual processes will increase the probability of an error occurring.]

Are these merges and/or transfers performed in batch? With what frequency?

[Batch processes that are not timely can result in data processing lags which affect the completeness of data after the close of the reporting period.]

- 24c. Beginning with receipt of a Medicaid claim in-house, describe the claim handling, logging, and processes that precede adjudication. When are Medicaid claims assigned a document control number and logged or scanned into the system? When are Medicaid claims microfilmed? If there is a delay in microfilming, how do processors access a claim that is logged into the system, but is not yet filmed?

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

24d. Please provide a detailed description of each system or process that is involved in adjudicating:

[Professional encounters arriving separately from an office visit may not be processed as quickly as the actual office visits. If these encounters are treated as “non-standard” events, the plan may not be able to easily link these encounters with the related office visit. For example, newborns exceeding a mother’s stay may have their hospital stay split into two parts. The part of the stay which coincides with the mother’s hospitalization may be processed on the mother’s claim and the remainder of the stay could be processed separately. Processing the newborn’s stay as two separate claims could affect the plan’s ability to report accurately on newborn hospital utilization.]

- A professional encounter(s) for a capitated service (e.g., child immunizations that arrive separately from the office visit.)

- A hospital claim for a delivery or for a newborn who exceeds its mother’s stay.

- 24e. Discuss which decisions in processing a Medicaid claim/encounter are automated, which are prompted by automated messages appearing on the screen, and which are manual. Document the opportunities a processor has for overriding the system manually. Is there a report documenting overrides or “exceptions” generated on each processor and reviewed by the claim supervisor? Please describe this report.

[If processors have the ability to override the system manually they may be able to force claims/encounters with missing information through the system. For example, a processor may be able to fill in missing diagnosis or procedures codes. Processors could also use override codes such as “99999” or “00000” to fill in for missing codes. If the system does not “kick-out” these override codes during processing, the services will be retained in the system without diagnosis or procedure detail. Processors may also be able to substitute “000000000” for a missing SSN, which can lead to services for unidentified members existing on the system.]

- 24f. Are there any outside parties or contractors used to complete adjudication, including but not limited to:

- ☐ Bill auditors (hospital claims, claims over a certain dollar amount)
- ☐ Peer or medical reviewers
- ☐ Sources for additional charge data (Ausual & customary)
- ☐ Bill “re-pricing” for carved out benefits (mental health, substance abuse)

How is this data incorporated into your organization's data?

[If outside parties are used, the plan should be incorporating data generated by those parties into the system. The data should first be run through the plan's data quality checks to verify its accuracy and completeness.]

- 24g. Describe the system's editing capabilities that assure that Medicaid claims are adjudicated correctly. Provide a list of the specific edits that are performed on claims as they are adjudicated, and note: 1) whether the edits are performed pre or post-payment, and 2) which are manual and which are automated functions.

[When reviewing plan adjudication edits, the State should concentrate on edits which affect the data fields that are used to generate plan performance measures and reports. Are outliers for length of stay and charges edited? Utilizing an automated editing process provides more consistent results that do not require processor judgment. Edits that are performed pre-payment can prevent invalid data from being incorporated into the system.]

- 24h. Discuss the routine and non-routine (ad hoc or special) audits that are performed on claims/encounters to assure the quality and accuracy and timeliness of processing. Note which audits are performed per processor, which rely on targeted samples and which use random sampling techniques. What is the total percentage of claims on-hand that are audited through these QA processes? How frequently?

[Note: This item is not relevant in instances where the EQRO is performing encounter data validation. When reviewing edits that are used to determine processor accuracy, consider that these edits will not provide information on the quality of the initial provider data submission. The audit plan should include random sampling techniques to provide an overall picture of quality. Plans will often concentrate on auditing complicated or aberrant claims/encounters rather than using a random sample. The plan should have instituted a process for sharing audit results with the processor to facilitate quality improvement.]

- 24i. Please describe how Medicaid eligibility files are updated, how frequently and who has “change” authority. How and when does Medicaid eligibility verification take place?

[The plan should add new enrollees to the system within a reasonable amount of time after they have enrolled. Enrollees should not be experiencing delays in access to care due to plan enrollment processes. The plan may be using a different enrollment process for Medicaid enrollees than for enrollees with commercial coverage.]

- 24j. How are encounters for capitated services handled by payment functions? What message appears to notify processors that they are handling a capitated service?

[If no message appears to notify processors that they are handling a capitated service, these services could be processed incorrectly. Payment functions can be suspended or modified to handle capitated services. The plan should explain how capitated services are processed and how processing affects data quality.]

- 24k. Describe how your systems and procedures handle validation and payment of Medicaid claims when procedure codes are not provided.

[Plans requiring valid procedure coding for all claims/encounters will have more detailed data available for reporting and analysis. However, these plans may allow processors to supply missing codes using a code book or override the system using an unspecified code. A number of plans use programs such as the GMIS AutoCoder product to fill in missing codes. When a plan supplies missing codes, the coding can be less accurate than codes supplied directly by the provider of service.]

- 24l. Where does the system-generated output (EOBs, letters, etc.) reside? In-house? In a separate facility? If located elsewhere, how is such work tracked and accounted for?

[Plans that have delegated the production of EOBs, letters and other output should monitor the accuracy and timeliness of those activities.]

- 25a. Describe all performance monitoring standards for Medicaid claims/encounters processing and recent actual performance results.

- 25b. Describe processor-specific performance goals and supervision of actual vs. target performance. Do processors have to meet goals for processing speed? Do they have to meet goals for accuracy?

- 25c. How is performance against targets figured into the official performance appraisal process? Into processor and supervisor compensation?

B. Enrollment System

1. Please describe any major changes/updates that have taken place in the last three years in your Medicaid enrollment data system (*be sure to identify specific dates on which changes were implemented*):

- New enrollment system purchased and installed to replace old system
- New enrollment system purchased and installed to replace most of old system - old system still used
- Major enhancements to old system (what kinds of enhancements?)
- New product line members stored on old system.

[Changes to a plan's enrollment system requiring data conversion and data integration can create data quality problems. Implementing a new enrollment system could lead to a loss of access to data on the old system, or the assignment of new member numbers for all enrollees. Data conversion and integration can also limit a plan's ability to track an enrollee's enrollment history. When a new product line is added to an existing system, a plan may need to make the new data fit the older process, therefore modifying the system to "handle" new information. Implementing such modifications can be difficult for a plan that has been using the same system for a number of years. The level of enrollment detail retained can be affected by such modifications.]

2. In your opinion, have any of these changes influenced, even temporarily, the quality and/or completeness of the Medicaid data that are collected? If so, how and when?

[Consider whether changes in data quality will affect the validity of the data submitted to the State].

3. How does your plan uniquely identify enrollees?

(Major changes to a MCO/PIHP's enrollment system could involve the conversion of membership data to a new system. When MCOs/PIHPs convert members, they may change the enrollee's ID number, making it difficult to track the enrollee's enrollment pattern across time. Changes to the enrollment system could also lead to a loss of data for specific patients.)

4. How do you handle enrollee disenrollment and re-enrollment in the Medicaid product line? Does the member retain the same ID?

(Enrollees should have a single ID number to facilitate tracking their experience. However, some plans change an enrollee's ID number when the enrollee re-enrolls. Experience for enrollees who have switched ID numbers will be more difficult to track. Dependents using an enrollee's ID are also difficult to identify for reporting purposes. For example, children without a unique ID could affect the ability of the plan to report on low birth-weight babies, childhood immunizations, and asthma inpatient admissions. This is an important point. EQROs should give higher "grades" to plans which have good methods of identifying enrollees.)

5. Can your systems track enrollees who switch from one product line (e.g., Medicaid, commercial plan, Medicare) to another?

Circle your response. Yes No

- 5a. Can you track an enrollee's initial enrollment date with your MCO/PIHP or is a new enrollment date assigned when an enrollee enrolls in a new product line?

5b. Can you track previous claim/encounter data or are you unable to link previous claim/encounter data across product lines?

6. Under what circumstances, if any, can a Medicaid member exist under more than one identification number within your MCO/PIHP's information management systems? Under what circumstances, if any, can a member's identification number change?

7. How does your MCO/PIHP enroll and track newborns born to an existing MCO/PIHP enrollee?

8. If your MCO/PIHP has a Medicare product line, describe how your enrollment systems link individuals simultaneously enrolled in both your Medicare product and the Medicaid product line.

8a. Is claim/encounter data linked for Medicare/Medicaid dual eligibles so that all encounter data can be identified for the purposes of performance measure reporting?

Circle your response.

Yes

No

8b. Is claim/encounter data linked for individuals enrolled in both a Medicare and Medicaid plan so that

all encounter data can be identified for the purposes of performance measure reporting?

Circle your response. Yes No

9. How often is Medicaid enrollment information updated?

[Enrollment information should be updated real-time, daily, or weekly.]

10. How is Medicaid continuous enrollment being defined? In particular, does your system have any limitations that preclude you from fully implementing continuous enrollment requirements exactly as specified in the State performance measure requirements?

11. Please attach a copy of the source code that you use to calculate Medicaid continuous enrollment.

12. How do you handle breaks in Medicaid enrollment--e.g., situations where a Medicaid enrollee is disenrolled one day and reenrolled the next simply for administrative reasons? Does this affect your continuous enrollment calculations?

13. Do you have restrictions on when Medicaid enrollees can enroll or disenroll? Please describe.

14. How do you identify and count Medicaid member months? Medicaid member years?

15. Please identify all data from which claims/encounters for the Medicaid product line are verified.

[Eligibility of the patient should be verified before claims and encounters are processed. Dates of enrollment and disenrollment are key reporting fields for Medicaid HEDIS measures. Eligibility status is dynamic for Medicaid beneficiaries and should be updated frequently. Eligibility status should also be verified before data is submitted to the State].

16. Does the plan offer vision or pharmacy benefits to its Medicaid members that are different from the vision or pharmacy benefits offered to its commercial enrollees (within a given contract or market area)?

Circle your response. Yes No

16a. If vision benefits vary by benefit package, outline the different options available. How are enrollees tracked?

-
- 16b. If pharmacy benefits vary by benefit package, outline the different options available. How are enrollees tracked?

C. Ancillary Systems

Use this section to record information on stand-alone systems or benefits provided through subcontracts, such as pharmacy or mental health/substance abuse.

NOTE: The measures listed in the following table are examples of measures that can be calculated with administrative data. The State and EQRO should tailor this table to list those measures that the State requires its MCO/PIHP contractors to produce and any other measures in which the State is interested.

1. Does your plan incorporate data from vendors to calculate any of the following Medicaid quality measures?
If so, which measures require vendor data?

MEASURE	VENDOR NAME
Childhood and Adolescent Immunization Rate(s)	
Well Child Visits	
Initiation of Prenatal Care	
Cervical Cancer Screening	
Chlamydia Screening in Women	
Low Birth-Weight	
Prenatal Care in First Trimester	
Breast Cancer Screening	
Glycohemoglobin Monitoring	
Ambulatory Follow-Up After Hospitalization For Specified Mental Health Disorders	
Provider Certification	

(If a plan is using vendor data, the plan should have a formal process in place to validate that data before incorporating it into their IS. The plan needs to check the vendor data for reliability, completeness and timeliness of submission.)

2. Discuss any concerns you may have about the quality or completeness of any vendor data.

(The plan should have staff who is experienced with the vendor's data. Furthermore, most plans will answer this question by saying "we have no concerns". Probe on this issue. The EQRO should "award points" for answers demonstrating understanding of potential problems with vendor data.)

3. Please itemize subcontracted Medicaid benefits that are adjudicated through a separate system that belongs to a vendor.

[Many plans contract-out services for pharmacy benefits management, mental health/substance abuse, laboratory and radiology services. If the data are processed on the vendor's system, it may not be forwarded to the plan in a complete form or on a timely basis. Vendors may also use a different method of processing resulting in data that will not merge with or complement plan data.]

4. Describe the kinds of information sources available to the MCO/PIHP from the vendor (e.g., monthly hard copy reports, full claims data).

5. Do you evaluate the quality of this information? If so, how?

[All of the vendor information should be verified for accuracy before a plan loads it into their IS. The plan and the vendor may not define variables consistently or use the same reporting format.]

6. Did you incorporate these data into the creation of Medicaid-related studies? If not, why not?

D. Integration and Control of Data for Performance Measure Reporting

This section requests information on how your MCO/PIHP integrates Medicaid claims, encounter, membership, provider, vendor, and other data to calculate performance rates. All questions relate to your current systems and processes, unless indicated otherwise.

File Consolidation

1. Please attach a flowchart outlining the structure of your management *IS*, indicating data integration (i.e., claims files, encounter files, etc.). For an example of the minimum level of detail requested, please refer to the example on page 92. Label the attachment II.D.1.
2. In consolidating data for Medicaid performance measurement, how are the data sets for each Medicaid measure collected:

- ◆ By querying the processing system online?
- ◆ By using extract files created for analytical purposes? If so, how frequently are the files updated? How do they account for claim and encounter submission and processing lags? How is the file creation process checked for accuracy?
- ◆ By using a separate relational database or data warehouse (i.e., a performance measure repository)? If so, is this the same system from which all other reporting is produced?

2. Describe the procedure for consolidating claims/encounter, member, and provider data for Medicaid performance measure reporting (whether it be into a relational database or file extracts on a measure by measure basis).

- 3a. How many different sources of data are merged together to create reports?

3b. What control processes are in place to ensure data merges are accurate and complete?

3c. What control processes are in place to ensure that no extraneous data are captured (e.g., lack of specificity in patient identifiers may lead to inclusion of non-eligible members or to double counting)?

3d. Do you compare samples of data in the repository to transaction files to verify if all the required data are captured (e.g., were any members, providers, or services lost in the process)?

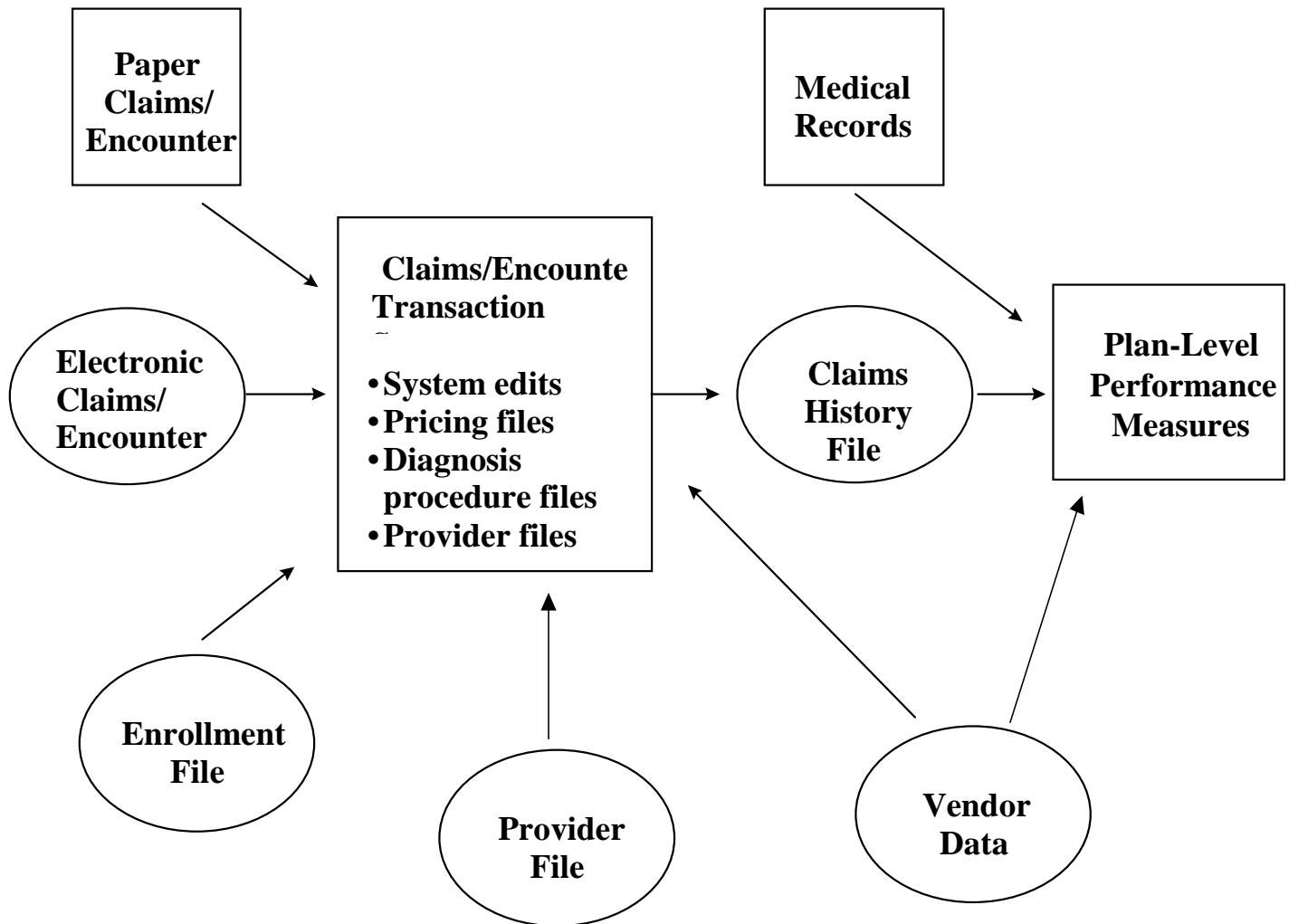
3e. Describe your process(es) to monitor that the required level of coding detail is maintained (e.g., all significant digits, primary and secondary diagnoses remain)?

4. Describe both the files accessed to create Medicaid performance measures and the fields from those files used for linking or analysis. *Use either a schematic or text to respond.*

5. Are any algorithms used to check the reasonableness of data integrated to report Medicaid performance measures?

6. Are Medicaid reports created from a vendor software product? If so, how frequently are the files updated? How are reports checked for accuracy?

7. Are data files used to report Medicaid performance measures archived and labeled with the performance period in question?

EXAMPLE**Performance Measure Data: Flowchart of Information System Structure**

Vendor Data Integration

8. Information on several types of external encounter sources is requested. In the table on the following page, for each type of delegated service, please indicate the following:
- Second column: Indicate the number of vendors contracted (or subcontracted) to provide the Medicaid service. Include vendors that offer all or some of the service.
 - Third column: Indicate whether your MCO/PIHP receives member-level data for any Medicaid performance measure reporting from the vendor(s). Only answer “Yes” if all data received from contracted vendor(s) are at the member level. If *any* encounter-related data is received in aggregate form, you should answer “No”. If type of service is not a covered benefit, indicate “N/A”.
 - Fourth column: Indicate whether all data needed for Medicaid performance measure reporting are integrated, at the member-level, with MCO/PIHP administrative data.
 - Fifth and sixth columns: Rank the completeness and quality of the Medicaid data provided by the vendor(s).
Consider data received from all sources when using the following data quality grades:
A = Data are complete or of high quality
B = Data are generally complete or of good quality
C = Data are incomplete or of poor quality
 - In the seventh column, describe any concerns you have in ensuring completeness and quality of Medicaid data received from contracted vendors. If measure is not being calculated because of any eligible members, please indicate “N/A”.

Medicaid Claim/Encounter Data from Vendors

Type of Delegated Service	Number of Contracted Vendors	Always receive member-level data from all vendor(s)? (Yes or No)	Integrate vendor data with MCO/PIHP administrative data? (Yes or No)	Completeness of Data (A, B, or C)	Quality of Data (A, B, or C)	Rationale for Rating/ Concerns with Data Collection
Behavioral Health						
Family Planning						
Home Health Care						
Hospital						
Laboratory						
Pharmacy						
Primary Care						
Radiology						
Specialty Care						
Vision Care						

Performance Measure Repository Structure

If your MCO/PIHP uses a performance measure repository, please answer the following question. Otherwise, skip to the Report Production section.

9. If your MCO/PIHP uses a performance measure repository for Medicaid performance measures, review the repository structure. Does it contain all the key information necessary for Medicaid performance measure reporting?

Report Production

10. Please describe your Medicaid report production logs and run controls. Please describe your Medicaid performance measure report generation process.

11. How are Medicaid report generation programs documented? Is there a type of version control in place?

12. How does your MCO/PIHP test the process used to create Medicaid performance measure reports?

13. Are Medicaid performance measure reporting programs reviewed by supervisory staff?

14. Do you have internal back-ups for performance measure programmers (i.e., do others know the programming language and the structure of the actual programs)? Is there documentation?

15. How are revisions to Medicaid claims, encounters, membership, and provider data systems managed?

IV. PROVIDER DATA

Compensation Structure

The purpose of this section is to evaluate the Medicaid provider compensation structure, as this may influence the quality and completeness of data. Please identify the percentage of member months in your plan contributed by Medicaid members whose primary care providers and specialists are compensated through each of the following payment mechanisms.

PAYMENT MECHANISM	Primary Care Physician	Specialist Physician
1. Salaried		
2. Fee-for-Service - no withhold or bonus		
3. Fee-for-Service, with withhold - Please specify % of withhold:		
4. Fee-for-Service with bonus Bonus range:		
5. Capitated - no withhold or bonus		
6. Capitated with withhold - Please specify % of withhold:		
7. Capitated with bonus Bonus range:		
8. Other		
TOTAL	100%	100%

[Timeliness and completeness of provider data submissions often varies by contracting arrangement. Salaried providers work directly for the MCO/PIHP and will submit data on a timely basis if data submission is a parameter in their contract with the MCO/PIHP. Fee-for-service providers have the largest incentive to submit accurate and complete data since their payment depends upon it. Capitated providers will need incentives to submit accurate and complete data. Their compensation should be linked to data submission, which can be done through the use of bonuses and withholds. For example, lag times may differ by compensation arrangement as follows: Capitation/Salaried-no lag, Fee-for-Service - 60 day lag, Hospital - 45 day lag.]

9. Please describe how Medicaid provider directories are updated, how frequently, and who has “change” authority.

[Provider directories should be updated to reflect changes in provider status to prevent members from selecting providers no longer under contract with the plan. The plan should have adequate security procedures in place to restrict the number of individuals who can access confidential provider information and institute changes in status.]

- 9a. Does your MCO/PIHP maintain provider profiles in its IS?

Please circle response: YES NO

- 9b. If yes to “a,” what provider information is maintained in the provider profile database (e.g., languages spoken and special accessibility for individuals with special health care needs). Other? *Please describe:*

10. How are Medicaid fee schedules and provider compensation rules maintained? Who has updating authority?

[Since providers consider fee schedule and compensation information to be confidential, access to this information should be restricted by the MCO/PIHP. The MCO/PIHP should have standardized process for updating and maintaining this information.]

11. Are Medicaid fee schedules and contractual payment terms automated? Is payment against the schedules automated for all types of participating providers?

[Manual payment processes are more prone to error and reduce processing speed.]

Requested Documentation

The documentation requested previously is summarized in the table below. Please label all attached documentation as described in the table, and when applicable by the item number from the ISCA (e.g., III.B.10). Remember, you are not limited to providing only the documentation listed below; you are encouraged to provide any additional documentation that helps clarify an answer or eliminates the need for a lengthy response.

Requested Document	Details
Previous Medicaid Performance Measure Audit Reports	Please attach final reports from any previous Medicaid performance measure audits in which your MCO/PIHP participated during the past two years
Organizational Chart	Please attach an organizational chart for your MCO/PIHP. The chart should make clear the relationship among key individuals/departments responsible for information management including performance measure reporting
Data Integration Flow Chart	Please provide a flowchart that gives an overview of the structure of your management IS. See the example provided in Section II-D. "Integration and Control of Data for Performance Measure Reporting." Be sure to show how all claims, encounter, membership, provider, and vendor data are integrated for performance measure reporting
Performance Measure Repository File Structure (if applicable)	Provide a complete file structure, file format, and field definitions for the performance measure repository
Program/Query Language for Performance Measure Repository Reporting (if applicable)	Provide full documentation on the software programs or codes used to convert performance measure repository data to performance measures
Continuous Enrollment Source Code	Attach a copy of the source code/computer programs that you use to calculate continuous enrollment for Medicaid enrollees
Medicaid Member Months Source	Attach a copy of the source code/computer programs that you use

Code	to calculate member months and member years for Medicaid enrollees
Medicaid Claims Edits	List of specific edits performed on claims as they are adjudicated with notation of performance timing (pre- or post-payment) and whether they are manual or automated functions
Statistics on Medicaid claims/encounters and other administrative data	Documentation that explains statistics reported in the ISCA

END OF DOCUMENT